PROPOSED ADDITION TO THE SPECIES GROUP OF NAMES FOR TAXA DIFFERENTIATED BY GEOGRAPHICAL CRITERIA. Z.N.(S.) 2302

By G. Bernardi (Muséum National d'Histoire Naturelle, Paris) and R.V. Melville (Secretary, International Commission on Zoological Nomenclature)

Many attempts have been made to introduce into speciesgroup names supplementary epithets representing a certain analogy with subgeneric names already accepted in the Code. An exhaustive study of the various terms proposed for this purpose is to be published elsewhere by Bernardi in 1979. Here we attempt only to explain our proposal to add provisions to the Code to deal with

such epithets.

2. The attempts referred to have arisen in studies of geographical variation and have been concerned mainly with (1) monophyletic groups of vicarious species (Artenkreis of Rensch, 1928; geogenus of Rensch, 1931; superspecies of Mayr, 1931; the species forming such groups have been termed "prospecies" by Birula, 1910, "hemispecies" by Mayr, 1940 and "allospecies" by Amadon, 1966); and (2) to groups of closely related subspecies within a species (Formengruppe of Laubmann, 1921; exerge of

Verity, 1925; citrapsecies of Dujardin, 1956).

3. There are in fact many synonyms denoting each of these concepts, but the Code is not concerned with these. Article 45 of the Draft Third Edition of the Code accepts such terms as "subspecies" and "race" as equivalent from the nomenclatural point of view. The role of the Code is simply to lay down a rule for the incorporation into scientific names of the epithets representing these concepts. This is comparatively easy, for even if different modes of citation have been proposed independently by different authors, there are many common points between them. These common points are:

(1) the names at supra-specific level are always placed between the generic name and the specific epithet, and the names at supra-subspecific level between the specific

and subspecific epithets;

(2) the epithet applied to the new (intermediate) category is always the oldest among those of the included species or subspecies, as the case may be.

The only variation in practice concerns an insignificant point: the use of parentheses (), or brackets [], or of neither around the name

of the intermediate taxon. This will be examined at length in due

course by Bernardi (in press, 1979).

4. In our opinion, the use of parentheses is to be preferred (a) because it conforms to the traditional use of parentheses for subgeneric names in the Code, (b) because it corresponds to the usage of the majority of authors, and (c) because brackets have been used to denote other concepts than those considered here. Only Amadon — and then only in his works published since 1966 — has proposed the use of brackets around the names of vicarious species.

5. During meetings between us in Paris in April 1978 and in January and April 1979, we have examined this problem in depth and propose the following addition to Article 5 of the Draft Third

Edition of the Code:

"An epithet may be added in parentheses after the genusgroup name, or be inserted in parentheses between the generic name and the specific epithet to represent a group of vicarious species; and an additional epithet may be placed in parentheses between the specific and subspecific epithets to represent a group of subspecies within a species; such epithets, which must always be printed with a lower-case initial letter, are not counted in the number of words in a binomen or trinomen.

"Examples.— In the genus *Ornithoptera* Boisduval, 1832, the species *O. priamus* (Linnaeus, 1758) is the first-named member of a group of vicarious species that includes also *O. lydius* Felder, 1865 and *O. croesus* Wallace, 1865. The supra-specific rank accorded to *O. priamus* may be expressed in the notation 'Ornithoptera (priamus) (Linnaeus, 1758)' and the relationship between the members of the group by the notations 'O. (priamus) priamus (Linnaeus, 1758)', 'O. (priamus) lydius Felder, 1865' and 'O. (priamus) croesus Wallace, 1865'. In the species Mellicta athalia (Rottemburg, 1775) there are two groups of subspecies of which M. athalia athalia and M. athalia celadussa (Fruhstorfer, 1910) are respectively the first-named subspecies. The relationship between the subspecies in each of these groups may be expressed by the following notations:

'M. athalia (athalia) athalia (Rottemburg, 1775)'; 'M. athalia (athalia) norvegica (Aurivillius, 1888)'; and 'M. athalia (celadussa) celadussa (Fruhstorfer, 1910)'; 'M. athalia

(celadussa) nevadensis (Ch. Oberthur, 1904)'."